

## Software Release Notice

**System:** MGS  
**Date:** 3 June 99

**Release:** McMurdo 2.2

### **Modification Description:**

McMurdo Station Upgrade

The following changes are planned for McMurdo Ground Station software. This release contains test programs to diagnosis reported problems. Modifications that have been completed since the McMurdo2.1 release.

1. Add NTP control capability to software.
2. Fixes ACU scan parameter bug.( MDR99100)
3. Stop tape mount at software start. (MDR99035)
4. Tape log entry at format.( MDR99031)
5. Actual record times in the tape log.( MDR99030, MDR99043, MDR99087)
6. Tape is not rewound at software start. (MDR99034, MDR99039)
7. At prepass, start scanner at 1 min. before pass, start recorders 10 sec before recorder time, and stopping recording 10 sec. after stop time. (MDR99012, MDR99042)
8. General recorder handling improvements. (MDR99047, MDR99065, MDR99082, MDR99077)
9. Added debug code for the BSSC/Demod problems.
10. Allow support for up to 100 Satellites and graceful degradation if more than 100 satellites are tried.
11. Setting of fractional bit rates to BER clock allowed.
12. Added time bias per satellite which is will not be removed at prepass.(MDR99040)
13. Corrected invalid track analysis results on C200 SCC. (MDR99117)

### **Files Affected:**

The files that were developed and/or utilized as part of McMurdo 2.2 are listed in Attachment 1: McMurdo 2.2 FILES.

### **Hardware Requirements:**

N/A

### **Validation Procedures:**

McMurdo2.2 will be validated through continued daily testing at NASA/McMurodo/10m for scheduled satellite passes. In addition, the following actions can be performed to validate some upgrades included in this release:

1. Verify NTP stop when time is changed from GUI and is restarted with 'Start NTP' button.
2. Test scan functionality from ACU screen.
3. Verify tape does not mount at software start.
4. Verify tape log entry is made after format.
5. Observe record times in the tape log.
6. Verify tape is not rewound at software start.
7. Verify recorder pass scheme.

### **Known Bugs or Limitaions:**

Some open DRs may not be resolved in this release due to equipment constraints. SA requests an 8 hour window to install new software, verify fixes and debug the following problems. High elevation passes, Bit sync., master lock up and temperature scanner.

**Installation Procedure:**

Scientific Atlanta staff will install the new release remotely. It will be necessary to coordinate the time of the update with the operator.

**Documentation Affected:**

N/A

**Comments:**

Pam Beard will support this software installation from S-A and her number is (770) 903-2164.

**Approval:**

The software modifications described in this release notice has been validated and accepted.

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NASA WGS Project Manager

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Date

**SOFTWARE RELEASED:**

The software modifications described in this release notice have been completed and released to ground station operations.

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System Manager

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Date

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NASA Program Monitor

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Date

**Attachment 1**  
**McMurdo 2.2 Files**

**The bin Directory:**

.StartAll  
.StartUIF  
AntennaControlStartup  
CopyETC  
Displays  
Nasa  
NasaStart  
RestoreETC  
Start  
StartRemote  
Stop  
StopRemote  
authent  
chkgw  
configud  
control  
dpsHndlr  
errhandler  
eup  
executive  
getNtpSyncInfo  
ioh  
pedcont  
postPassShell  
que\_chk  
rci\_client  
rci\_rmt  
rci\_server  
recon  
recsch  
resetLANGateway  
resetLANGateway2  
resetLANGateway3  
resetLANGateway4  
resetLANGateway5  
resetLANGateway6  
resetLANGateway7  
resetLANGateway8  
resetLANGateway9  
rmqs  
schedmon  
snyHndlr  
start.awk  
start\_ntp  
status\_1  
stop.awk  
stop\_ntp  
sup  
tapelog  
terminal  
testexec  
time\_code\_handler

track  
uactask  
winPrint

**The etc Directory:**

N/A

**The etc/hpib directory:**

N/A

**The etc/config directory:**

N/A.